

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A target intended to emit neutrons when bombarded with particles, comprising:

neutron emissive parts and neutron non-emissive parts which are juxtaposed, only the neutron emissive parts containing tritium and deuterium emitting neutrons during the bombardment with particles, said emissive and non-emissive parts being arranged so as to form a non-uniform pattern as a coded mask such that said target emits a neutron flow including plural neutron beams coded by the pattern of the mask.

Claim 2 (Currently Amended): The target according to claim 1, wherein the emissive parts are formed from at least one metal hydride in which tritium and deuterium nuclei are fixed, the metal of the metal hydride being deposited on a support in non-hydrogen fixing material through a stencil.

Claim 3 (Withdrawn): The target according to claim 1, further comprising:
an extended neutron emissive zone formed from at least one metal hydride, said extended zone cooperating with a mask in neutron non-emissive material, the non-emissive material of the mask partially covering up the extended emissive zone vis-à-vis the particles and forming non-emissive parts.

Claim 4 (Withdrawn): The target according to claim 3, wherein the extended emissive zone is supported by a support in a non-hydrogen fixing material.

Claim 5 (Previously Presented): The target according to claim 2, wherein the non-hydrogen fixing material of the support is chosen from among copper, silver or gold, said metals being used alone or in combination.

Claim 6 (Withdrawn): The target according to claim 2, wherein the metal hydride is chosen from the group consisting of titanium hydride, zirconium hydride, erbium hydride, scandium hydride and vanadium hydride.

Claim 7 (Withdrawn): The target according to claim 3, wherein the non-emissive material of the mask is chosen from among molybdenum, steel, iron, copper, tungsten and tantalum, said metals being used alone or in combination.

Claim 8 (Previously Presented): A particle accelerator, comprising a target according to claim 1.

Claim 9 (Cancelled).

Claim 10 (Previously Presented): The particle accelerator according to claim 8, wherein the particle accelerator is equipped with an α particle detector associated with the emission of neutrons.

Claim 11 (Previously Presented): The particle accelerator according to claim 10, wherein the α particle detector comprises a plurality of pixels arranged in a matrix.

Claim 12 (Previously Presented): The particle accelerator according to claim 10, wherein the target is inclined in relation to the direction of the particles that are bombarding it.

Claim 13 (Previously Presented): The particle accelerator according to claim 10, wherein the target is substantially parallel to the α particle detector.

Claims 14-15 (Cancelled).

Claim 16 (Previously Presented): A neutron generating tube, comprising a target according to claim 1.

Claim 17 (Cancelled).

Claim 18 (Previously Presented): The neutron generating tube according to claim 16, wherein the neutron generating tube is equipped with an α particle detector associated with the emission of neutrons.

Claim 19 (Previously Presented): The neutron generating tube according to claim 18, wherein the α particle detector comprises a plurality of pixels arranged in a matrix.

Claim 20 (Previously Presented): The neutron generating tube according to claim 18, wherein the target is inclined in relation to the direction of the particles that are bombarding it.

Claim 21 (Previously Presented): The neutron generating tube according to claim 18, wherein the target is substantially parallel to the α particle detector.

Claims 22-23 (Cancelled).